BEST AVAILABLE COPY

(12) UK Patent Application (19) GB (11) 2 291 584 (13) A

(43) Date of A Publication 31.01.1996

(21) Application No 9415278.2

(22) Date of Filing 23.07.1994

(71) Applicant(s)

Ford Motor Company Limited

(Incorporated in the United Kingdom)

Eagle Way, BRENTWOOD, Essex, CM13 3BW, United Kingdom

(72) Inventor(s)
Simon Bury
Mark Anthony Adams

(74) Agent and/or Address for Service
A Messulam & Co
24 Broadway, LEIGH-ON-SEA, Essex, SS9 1BN,

(51) INT CL⁶
B60N 2/36 2/44

(52) UK CL (Edition O)

A4L LAAS LBPB L109 L120 L144

(56) Documents Cited GB 0872118 A GB

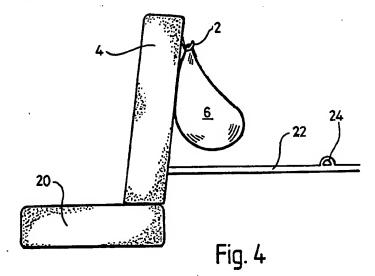
GB 0454349 A

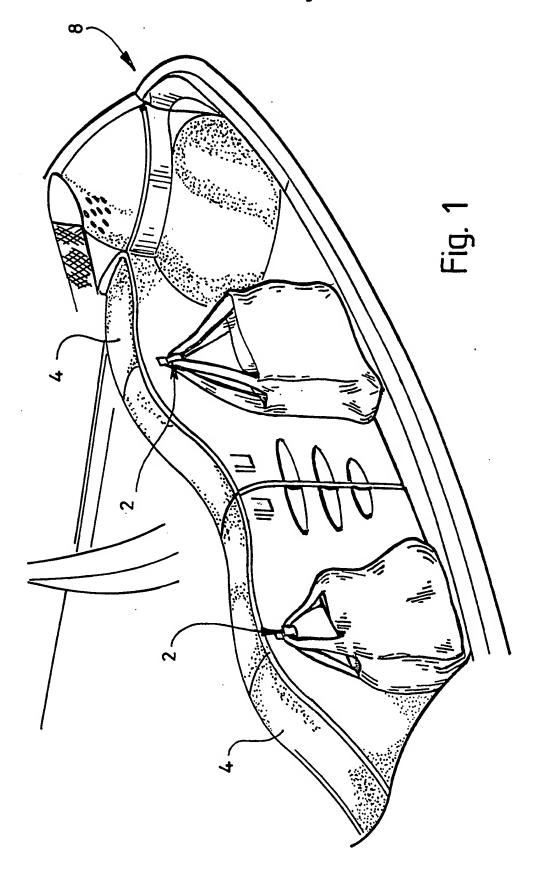
(58) Field of Search
UK CL (Edition M) A4L LAAR LAAS LAH LBEJ LBEQ
LBPB LCC LCR LCX , B7J
INT CL⁵ B60N 2/02 2/20 2/30 2/32 2/36 2/44 3/00
ONLINE DATABASE: WPI

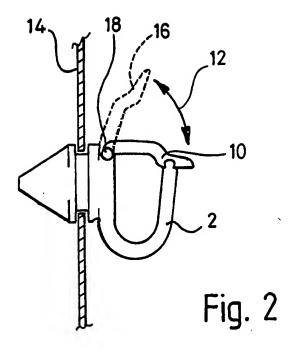
(54) A seat for a motor vehicle

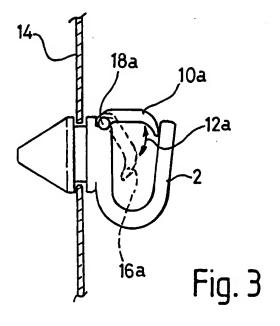
United Kingdom

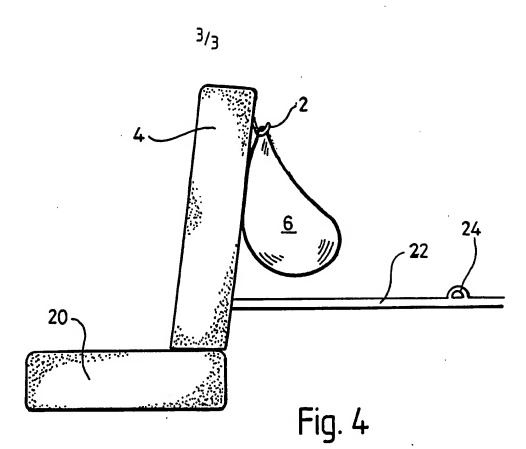
(57) A seat for a motor vehicle comprises a squab 20 for sitting on and a seat-back 4 which has a hook 2 in its back. The seat-back 4 is pivotable between a first position which allows a passenger to sit in the seat, and a second position in which the back of the seat-back 4 provides a load surface. The hook 2 may be used for hanging things on, for example a shopping bag 6, when the seat is in the first position. In the second position the hook 2 may be used for anchoring a load. Different types of hooks are described.

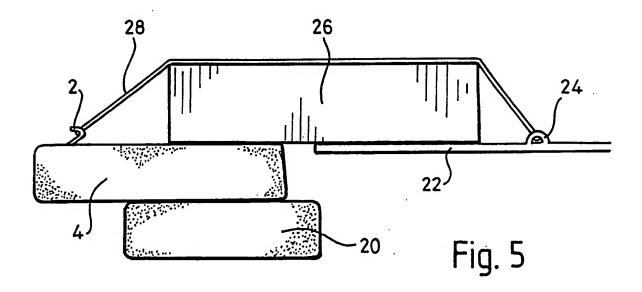












A SEAT FOR A MOTOR VEHICLE

The present invention relates to a seat for a motor vehicle, and particularly for a saloon or hatchback motor car.

5

10

15

20

25

30

According to the present invention there is provided a seat for a motor vehicle, the seat comprising a squab for sitting on and a seat-back which can be pivoted relative to the squab between a first position which allows a passenger to sit in the seat, and a second position in which the back of the seat-back provides a load surface, wherein the back of the seat-back is provided with a hook for hanging things on when the seat-back is in the first position, and to which a load can be anchored when the seat-back is in the second position.

The load may be anchored by any suitable anchoring means, for example a rope, wire, cord, chain, or string. The load may be a piece of luggage, and anchoring of this to the seat-back helps to prevent the luggage sliding about in the vehicle. The anchoring means may be elastic.

Preferably the seat is a rear seat of a motor vehicle. Thus when the seat is being used for sitting on, the hook may be employed for supporting, for example, a bag of shopping in the boot of the vehicle. By pivoting the seat-back forwards, the back of the seat-back may be used to support an item of luggage, for example a suitcase, and a rope or other anchoring means may be passed through the hook and over or around the luggage so as to anchor the luggage and reduce its freedom to move relative to the load surface.

8

In a preferred embodiment the seat is used in a motor vehicle which has a boot space and which is provided with a second anchoring member to provide a second anchoring point for a rope or other anchoring means so as to anchor the luggage. The second anchoring member may comprise a second hook, a loop of metal or structural plastics material, a bracket, or any other suitable means for retaining and/or tensioning a rope or other anchoring means in co-operation with the hook.

10

15

20

25

30

5

The seat is preferably provided with a recess in which the hook may be stowed when not required. The hook may be pivoted or folded into the recess, or it may be mounted in the back of the seat-back by means of a demountable connection, for example a screw-threaded connection, which allows the hook to be demounted for stowing.

In a preferred embodiment the hook is provided with means for releasably retaining an item which it supports. This allows an item to be securely retained by the hook whilst the vehicle is in motion. This may be achieved, for example, by providing the hook with a spring-loaded retention flap which in a rest position forms a closed loop with the hook. By pushing, for example, the handle of a shopping bag against the spring-loaded retention flap, the flap opens up the loop to allow the shopping bag loop and be retained by the hook. enter the Alternatively the retention flap could be provided with an The user pivots the flap so as to open up active hinge. the loop and allow the shopping bag to be hung on the hook, and pushes on the active hinge to cause the flap to snap into place.

The seat may have only a single hook, but it is preferred that the seat is provided with a plurality of hooks to

allow several items to be supported on the seat-back, or to allow a plurality of different anchoring points to be employed.

5 The seat may be a single seat or a seat for more than one person, for example the rear seat arrangement of a family saloon car or hatchback. If the seat is for more than one person, the seat-back may optionally be divided into a plurality of parts, each of which may be independently pivotable with respect to the squab or squabs.

The seat may optionally be provided with means for releasably retaining it in a preferred position. The means may comprise, for example, a latching mechanism which is engageable as a push fit and which is releasable by operating a handle or lever. Such mechanisms are well known to those skilled in the art. Two separate latches may be provided, one for engaging and/or retaining the seat in the first position, and the other for engaging and/or retaining the seat in the second position.

15

20

25

30

The seat-back may be manufactured separately from the squab, and the invention therefore also provides a seat-back for a seat for a motor vehicle, which seat-back is adapted to be pivotally mounted in relation to a squab for sitting on, so that the seat-back can be pivoted relative to the squab between a first position which allows a passenger to sit in the seat, and a second position in which the back of the seat-back provides a load surface, wherein the back of the seat-back is provided with a hook for hanging things on when the seat-back is in the first position, and to which a load can be anchored when the seat-back is in the second position.

The invention will now be further described, by way of example, with reference to the following drawings in which:

Figure 1 is a perspective view of two seats in accordance with the present invention mounted in a motor vehicle;

Figure 2 is a sectional view of a hook for a seat according to one embodiment of the invention;

Figure 3 is a sectional view of a hook for a seat according to an alternative embodiment. of the invention;

15

10

Figure 4 is a view of a seat in accordance with the invention when used in a first position; and

Figure 5 is a view of a seat in accordance with the invention when used in a second position.

Figure 1 shows a motor car 8 in which the seat-backs 4 of the rear seats each have a hook 2 which is used to support a shopping bag 6. Because the shopping bags 6 are supported in this way they do not roll around on the floor of the boot when the car is being driven. The driver can therefore drive home from the shops without the prospect of being confronted with the familiar sight of shopping strewn throughout the boot.

30

35

25

Figures 2 and 3 show two alternative embodiments of hinge for use with the invention. In Figure 2, the hook 2 is fixed in a sheet or bar of metal 14 in the seat-back 4. The hook 2 has a retention flap 10 which is biased by an active hinge 18 so that it is bistable between the closed

loop position shown by solid lines and the open position shown by the dashed lines 16. Pivoting of the retention flap 10 in the directions of the arrow 12 opens or closes the hook so that a shopping bag or other item may be placed on, or removed from, the hook 2.

In Figure 3, the retention flap 10a has a hinge 18a which is spring-biased so as to urge the flap 10a to adopt the rest position shown by the solid lines. Pushing or dropping the handle of a shopping bag, for example, against the flap 10a forces the flap 10a towards the position shown by dotted lines 16a. The movement of the flap 10a in the direction of the arrow 12a opens.or closes the hook 2 so that a shopping bag or other item may be placed on, or removed from, the hook 2.

Figure 4 shows a seat in accordance with the invention being used to support a bag 6 of shopping. The seat comprises a squab 20 for sitting on, and a seat-back 4 which is provided with a hook 2 in its back. The hook 2 supports the bag 6 so as to prevent the bag 6 from rolling around on the floor 22 of the boot. The floor 22 is provided with a loop 24 of metal which will be used to help secure a piece of luggage 26 as shown in Figure 5. With the seat-back 4 pivoted forwards the back of the seat-back 4 co-operates with the floor 22 of the boot to provide a load surface which carries the luggage 26. rope 28 is passed through the hook 2 and the loop 24 and back, and this rope 28 serves to anchor the luggage 26 so as to help prevent it from moving relative to the floor 22 or the seat-back 4. More than one hook 2 and/or loop 24 may be provided so as to allow a greater choice in positioning of the rope or other anchoring means, and more secure anchoring of the luggage 26.

10

15

20

25

30

Although the invention has been described with reference to the use of the hook for hanging shopping bags or other items when the seat is in the first position, the use of the hook is not limited to this application, and it may be used for other applications. For example the hook may be used to anchor luggage when the seat is in the first position as well as when it is in the second position.

CLAIMS

- 1. A seat for a motor vehicle, the seat comprising a squab for sitting on and a seat-back which can be pivoted relative to the squab between a first position which allows a passenger to sit in the seat, and a second position in which the back of the seat-back provides a load surface, wherein the back of the seat-back is provided with a hook for hanging things on when the seat-back is in the first position, and for anchoring a load when the seat-back is in the second position.
- A seat as claimed in claim 1, wherein the seat is provided with a recess in which the hook may be stowed
 when not being used.

10

20

30

3. A seat as claimed in claim 1 or claim 2, wherein the hook is provided with means for releasably retaining an item which it supports.

4. A seat as claimed in claim 3, wherein the releasable retention means comprises a spring-loaded flap.

- A seat as claimed in any one of the preceding claims,
 wherein the seat is provided with means for releasably retaining it in a preferred position.
 - 6. A motor vehicle in which is mounted a seat as claimed in any one of the preceding claims.
 - 7. A motor vehicle as claimed in claim 6, which has a boot space which is provided with a second anchoring member for a rope or other anchoring means.

8. A motor vehicle as claimed in claim 7, wherein the second anchoring member comprises a loop of metal.

ŗ

9. A seat-back for a seat for a motor vehicle, which seat-back is adapted to be pivotally mounted in relation to a squab for sitting on, so that the seat-back can be pivoted relative to the squab between a first position which allows a passenger to sit in the seat, and a second position in which the back of the seat-back provides a load surface, wherein the back of the seat-back is provided with a hook for hanging things on when the seat-back is in the first position, and to which a load can be anchored when the seat-back is in the second position.

10

15 10. A seat substantially as hereinbefore described with reference to and as shown in any one of the drawings.

Examiner's report (The Search report	to the Comptroller under Section 17	GB 9415278.2 Search Examiner D BUCKLEY	
Relevant Technical	Fields		
(i) UK Cl (Ed.M)	A4L (LAAR, LAAS, LAH, LBEJ, LBEQ, LBPB, LCC, LCR, LCX); B7J		
(ii) Int Cl (Ed.5)	B60N (2/02, 2/20, 2/30, 2/32, 2/36, 2/44, 3/00)	Date of completion of Search 17 OCTOBER 1994	
Databases (see below) (i) UK Patent Office collections of GB, EP, WO and US patent specifications.		Documents considered relevant following a search in respect of Claims:- 1 TO 10	
(ii) ONLINE DATA	BASES : WPI		

Categories of documents

X :	Document indicating lack of novelty or of inventive step.	P:	Document published on or after the declared priority date but before the filing date of the present application.
Y:	Document indicating lack of inventive step if combined with one or more other documents of the same category.	E:	Patent document published on or after, but with priority date earlier than, the filing date of the present application.
A:	Document indicating technological background and/or state of the art.	&:	Member of the same patent family; corresponding document.

Category	Identity of document and relevant passages		Relevant to claim(s)
X .	GB 872118	(FORD MOTOR CO) - whole document, but see especially knob 12	1, 6 and 9 at least
X	GB 454349	(VAUXHALL MOTORS) - whole document, but see especially members V, K & Y	1, 2, 5, 6 and 9 at least

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:		
☐ BLACK BORDERS		
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES		
☐ FADED TEXT OR DRAWING		
BLURRED OR ILLEGIBLE TEXT OR DRAWING		
☐ SKEWED/SLANTED IMAGES		
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS		
☐ GRAY SCALE DOCUMENTS		
LINES OR MARKS ON ORIGINAL DOCUMENT		
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY		

IMAGES ARE BEST AVAILABLE COPY.

☐ OTHER:

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.